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EXECUTIVE SUMMARY

While there is significant interest in marketing applications of artificial intelligence (AI), widespread adoption remains limited. However, AI holds immense potential to revolutionize marketing practices. Therefore, research on AI in marketing is essential. By analyzing current applications, exploring potential future use cases, understanding implementation strategies, and identifying areas for improvement, you can develop a comprehensive perspective on the long-term impact of AI in marketing.

AI offers both new approaches to value creation and distribution for customers as well as improvements to current marketing strategies. For example, Through the incorporation of AI, social media marketing and programmatic advertising can achieve a more unbiased and comprehensive understanding of customer behavior, along with enhanced understanding through data-driven forecasting, businesses are leveraging advanced marketing tools such as voice technology, biometrics, and conversational user interfaces. These cutting-edge innovations enhance the value for both brands and consumers by offering scalable experiences and in-depth knowledge. Key attributes of these tools include extreme personalization and cost-effectiveness.

However, before fully implementing Artificial Intelligence in realm of marketing, various critical issues should be kept in mind, including the potential for malicious use, its impact on workforce dynamics, and the technological infrastructure itself. Given the structural shifts this entails—ranging from evolving skill requirements to changes in marketing strategies and brand focus—it is important to properly check the long-term implications that such a significant transformation.

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INTRODUCTION

The purpose of this chapter is to introduce the reader to the thesis's main idea and context. The chapter will first discuss the main points of the research question before delving into the specific research problem. The chapter's conclusion will provide an overview of the study's scope and significance. Digital marketing is one of the areas that has been most affected by the widespread use of artificial intelligence (AI). AI technologies are reshaping how businesses interact with customers, optimize campaigns, and analyze data. This project explores "The Role of Artificial Intelligence in Shaping Digital Marketing," aiming to uncover the ways in which AI drives innovation and efficiency in this dynamic field.

Background

Marketing has emerged as a field with immense potential for enhancement through the application of AI. According to a PwC report (2017), investing in AI is projected to increase global GDP by 14% by 2030. A survey of international marketing professionals conducted in late 2020 revealed that 41% reported improved performance and revenue growth due to AI-powered marketing initiatives, while 38% linked AI usage to the creation of more personalized consumer experiences. AI is expected to play a significant role in tasks traditionally performed by humans, such as effective communication, empathy, and conversational interactions—a trend already evident in products like intelligent virtual assistants.

Over the past two decades, AI has profoundly impacted industries such as marketing, finance, healthcare, engineering, and education. Organizations are increasingly investing in machine learning to enhance marketing capabilities and leverage the wealth of data available due to the growing digital interconnection between businesses and consumers. BCC Research predicts that by 2022, the market for machine learning solutions will grow at an annual rate of 43.6%, reaching $8.8 billion.

Technological advancements have enabled businesses to scale production and leverage digital marketing to boost customer visibility and sales opportunities. Combining big data with research on smart applications has driven progress in marketing. AI has a major part in

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the domain, facilitating the development of advanced business opportunities and shaping the growth of digital marketing strategies for future.

Research Problem

Modern marketing demands a deep understanding of consumers' needs and interests, along with the ability to respond quickly and effectively to new information. Many businesses, however, struggle to make real-time, data-driven decisions because they do not integrate AI into their marketing strategies. The personalization process generates vast amounts of data, enabling businesses to gain insights into consumer behavior and preferences across multiple platforms and touchpoints. This allows for more precise matching of customer interests with relevant content, ultimately driving engagement. This is particularly effective when customers actively participate throughout their entire e-commerce journey— from awareness and evaluation to purchase, review, and consumption. However, ambiguity remains about what truly constitutes personalization in e-commerce, despite many vendors claiming to provide it.

Familiarity with AI systems and techniques relevant to marketing tools greatly enhances the likelihood of running successful campaigns. Effective marketers also recognize the limitations of current AI technologies, which helps them strategically leverage these tools. Interestingly, studies have shown that marketers' predictions are sometimes more accurate than AI-generated forecasts. Research continues to explore the intersection of marketing and AI, emphasizing the growing importance of understanding both disciplines to create impactful marketing campaigns.

Research Gaps

While significant advancements have been made in integrating AI into digital marketing, several Gaps remain. Current research often emphasizes technological capabilities but lacks focus on practical implementation strategies. Moreover, there is limited exploration of how AI influences customer relationships, decision-making, and ethical considerations in marketing practices. The potential challenges businesses face during AI adoption, such as cost implications, workforce upskilling, and data privacy concerns, also require deeper analysis.

Objective and Aims

This research will evaluate the impact of AI in domain of digital marketing. It seeks expand current theories regarding the incorporation of AI into world of digital marketing strategies and its effects on marketing outcomes. The research will explore the role and applications of Artificial Intelligence on digital marketing and analyze where/how businesses can use it for betterment of their effectiveness. The study will address the following key questions:

- **Q1: What role does AI play in contemporary digital marketing?**

- **Q2: How is AI poised to influence the future of digital marketing?**

Scope of this Study

Since marketing is a broad topic, I have concentrated on the field of digital marketing. Due to their extensive media coverage, I decided to focus my research on digital marketing and artificial intelligence before writing my thesis. My primary areas of interest will be artificial intelligence, machine learning, digital marketing, and bigdata. I will also discuss the future applications of artificial intelligence in business and marketing. I want to encourage more marketing education in the quickly growing sector of digital marketing by sharing their studies.

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Key Concepts

Artificial Intelligence (AI) refers to the concept and development of computer systems capable of performing tasks that typically require human intelligence. Examples include understanding various languages, making complex decisions, and recognizing objects through visual or auditory input.

Machine Learning (ML) is a subset of AI, focusing on a computer's ability to learn from unstructured data without explicit programming. It enables machines to identify patterns in the data collected from their sensors and extract meaningful insights.

Digital Marketing (DM) involves leveraging digital channels—such as search engines, social media platforms, email, and websites—to promote products, services, or brands. It includes a wide array of strategies and activities, such as search engine optimization (SEO), content marketing, social media marketing, email marketing, pay-per-click (PPC) advertising, and more.

LITERATURE REVIEW

This chapter aims to teach some of the basic ideas of artificial intelligence (AI), including machine learning, deep learning, and digital marketing. The knowledge that has been accumulated over the past 20 years is extremely important to today's kids. Even if experts might not have realized the benefits that data could have provided to organizations, data now forms the basis of daily operations for enterprises..

Artificial Intelligence

Artificial Intelligence (AI) refers to the process of equipping machines with human-like intelligence. The roots of AI research trace back to the 1950s, when Alan Turing introduced the concept of the Turing Test, questioning whether machines could think—a pivotal moment that marked the inception of AI as a field.

In marketing, AI plays a transformative role by automating operations and enhancing decision-making. With the power of deep learning, AI enables computers to analyze user behavior more accurately and predict which audience segments are most likely to convert into customers. It also facilitates product customization by leveraging data such as location, purchase history, demographics, and other factors to identify potential customers.

Furthermore, AI incorporates monitoring and consumer feedback data about products themselves.

AI empowers businesses to deliver highly personalized and relevant messages to customers. Through predictive analytics, companies can gain deeper insights into customer preferences and provide tailored recommendations. For instance, platforms like Netflix and Amazon use AI to suggest shows and products based on user behavior. By creating targeted data points, marketers can effectively guide customers toward specific products or services, improving their overall experience and solving problems efficiently.

Machine Learning

Machine learning, a specialized branch of artificial intelligence, enables computers to adapt autonomously to new environments by automating conceptual and analytical modeling. It is categorized into three primary types: **Supervised Learning**, **Unsupervised Learning**, and **Reinforcement Learning**.

1. **SupervisedLearning**

   This subset of machine learning focuses on building knowledge from labeled data. By analyzing predefined input-output pairs, the model adjusts its parameters as new data is introduced, ensuring

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accurate classification and prediction. Supervised learning enables systems to forecast outcomes for unprocessed data effectively, leveraging insights gained from training on labeled datasets.

1. **UnsupervisedLearning**

   Unlike supervised learning, this type of machine learning involves analyzing and classifying data structures without prior knowledge of output variables. It extracts meaningful patterns or critical insights directly from raw, unstructured data. This approach allows for a deeper exploration of data relationships and hidden structures without relying on labeled examples.

2. **ReinforcementLearning**

   Distinct from the first two models, reinforcement learning employs a framework where the system This method often utilizes deep learning techniques to create models capable of optimizing performance based on prior processed data. Its primary objective is to enhance decision-making by iteratively improving based on the feedback loop.

Each of these machine learning approaches serves distinct purposes, contributing to AI's ability to process, analyze, and learn from vast and complex datasets.

Deep Learning

Deep learning is widely used across various domains. For instance, it powers applications that transcribe spoken language into written text and translate text into multiple languages. Beyond these common uses, deep learning is applied in more specialized contexts. For example, banks and credit card companies utilize it to detect fraud, assess loan risk, and predict bankruptcy. Similarly, hospitals employ deep learning to identify diseases, diagnose patients, and even assist in treatment. Deep learning-based AI ensures sustained utility by relying on preset variable quantities, enabling machines to reproduce instructions consistently and deliver reliable outcomes. Its structure comprises neurons, the network's learning units, which convert input signals into output signals.

A significant advantage of deep learning is cost efficiency. Processing large datasets or performing repetitive operations can be costly with human labor, as people require breaks and rest. In contrast, AI systems can operate continuously without fatigue, distractions, or downtime. With deep learning, machines can be programmed to execute repetitive tasks efficiently and without complaints about workload or fatigue.

Deep learning has revolutionized the technology sector by automating tasks through digitally encoded data.

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This transformation underscores the need for continued research and applications of artificial intelligence and deep learning across diverse technological advancements, further expanding its capabilities and impact.

Digital Marketing

This approach gained prominence in the 1990s with the advent of the internet. Businesses often integrate both traditional and digital marketing strategies in their campaigns, as both share fundamental principles and offer innovative ways to connect with customers and understand their behavior.

While traditional marketing options remain relevant, it facilitates two-way interactions between companies and customers by combining marketing efforts with customer feedback. The adaptable nature of digital technologies allows businesses to create new value in emerging environments.

Digital technologies enhance business value by enabling innovative customer experiences and improving customer interactions. Digital marketing employs various flexible touchpoints, such as marketing activities, organizational processes, and customer engagement strategies, to foster connections with customers. The annual increase in interactions—exceeding 20%—reflects the growing significance of digital technologies as more customers shift from offline to online channels, and younger, tech-savvy consumers dominate the market.

 This trend highlights the need to examine how digital marketing research aligns with advancements in the corporate sector, providing insight into areas where further exploration and innovation are required

10 Digital Marketing Tools

Content Marketing

Content marketing focuses on creating and sharing relevant, valuable, brand-related content to engage current or potential customers and other target audiences. This content, distributed across various online and print media, aims to educate, solve problems, entertain, or inspire the audience, ultimately helping them make informed decisions that add value to their lives.

AI-powered content creation has unlocked significant potential in this field. Generating quality content for various products and services can often be time-intensive and costly. Companies like Alibaba have developed advanced AI tools capable of producing millions of lines of text and generating 20,000 lines of advertisements in mere seconds, showcasing how AI can revolutionize content marketing by making it faster, more scalable, and cost-effective.

Search Engine Optimization

Search Engine Optimization (SEO) refers to the strategies and techniques used to improve the visibility of a website, blog, or infographic in search engine results pages (SERPs), ensuring they appear at the top when users search for related topics.

SEO involves optimizing both the content and structure of a website to enhance its ranking and increase organic web traffic. Key elements of effective SEO include a user-friendly design, original and valuable content, and a strong meta description. Websites with comprehensive content often engage users for longer periods, which can further boost their ranking in search results by signaling to search engines that the page provides valuable information. This increases the likelihood of attracting qualified visitors and improving overall search engine performance.

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Social Media Marketing

Social media platforms have transformed how people connect and share information, ideas, and opinions in the marketing landscape. This shift has brought about three major changes for businesses, driven by social media's unique characteristics as "powerful, networked, equitable, and engaging organisms."

First, it has enabled contact between organisations and consumers in ways that were previously unfeasible. Through various platforms like social networking sites (e.g., Instagram, Snapchat, TikTok, Meta), messaging services (e.g., Twitter), and creative communities (e.g., YouTube), social media networks allow people to come together around shared values andinterests, fostering direct engagement between brands and their audiences.

Second, it has reshaped consumers - businesses interact and influence one another. Social interactions— whether active, passive, or through simple conversations—impact purchasing decisions and consumer behavior. These interactions, often referred to as "word-of-mouth (WOM) effects," play a significant role in shaping buying habits and brand perceptions.

Lastly, the accessibility of social media data has enabled businesses to manage customer relationships more effectively and make more informed decisions. Data from social media is often described from its "size/volume, variation, and speed/velocity" (3Vs), providing businesses with valuable insights into customer preferences, trends, and behavior.

AI enhances the effectiveness of social media marketing by identifying optimal times for sending emails, determining when emails are most likely to be read, and recommending the best content, design, and imagery based on customer preferences. Algorithms can also detect patterns to predict which offers will resonate with customers. For example, some customers may be more motivated by free delivery, while others may respond better to discounts on specific products, such as furniture or electronics. This level of personalization, powered by AI, enables businesses to target their audience more precisely and drive greater engagement.

AI-driven Marketing

AI has become an invaluable tool in marketing, helping businesses identify customer needs, match them with

the appropriate products or services, and encourage purchasing decisions. With AI-powered marketing strategies, businesses can see a significant increase in sales. According to a 2018 McKinsey study, marketing was identified with over 400 use cases employing advanced AI techniques.

AI enables the development of machine learning algorithms that predict customer behavior by examining the data like customer sentiment, transactions, habits of browsing, and other key metrics. By leveraging personalized communication, recommendations, and data-driven insights, AI helps design strategies that drive engagement of customer and retention. Ultimate goals of Artificial Intelligence in marketing are to reduce costing, increase profits, and enhance overall customer's satisfaction.

A prime example of AI in action is the **chatbot**, which mimics human intelligence to. While primarily used to streamline customer service, chatbots also offer valuable data analysis capabilities that can improve digital marketing efforts, making them an effective tool for enhancing business operations and customer interactions.

Marketing Automation

Marketing automation refers to the use of software and technology to streamline and automate various marketing tasks and processes, including lead generation, email marketing, social media management, and customer segmentation. This automation enhances decision-making, increases productivity, improves returns on marketing investments, and boosts customer satisfaction and loyalty by delivering personalized marketing efforts. By leveraging automated tools, marketing professionals can make more efficient and cost-effective decisions.

The advent of marketing automation has significantly transformed the marketing industry by reducing the effort needed to understand customer needs and provide personalized information to guide their purchasing decisions. Automated systems help marketers inform customers about potential product options and assist sellers in targeting the right markets, fostering stronger connections between buyers and suppliers. When combined with AI and other advanced technologies, marketing automation is expected to further enhance digital marketing processes, improve the customer experience, and drive better business outcomes.

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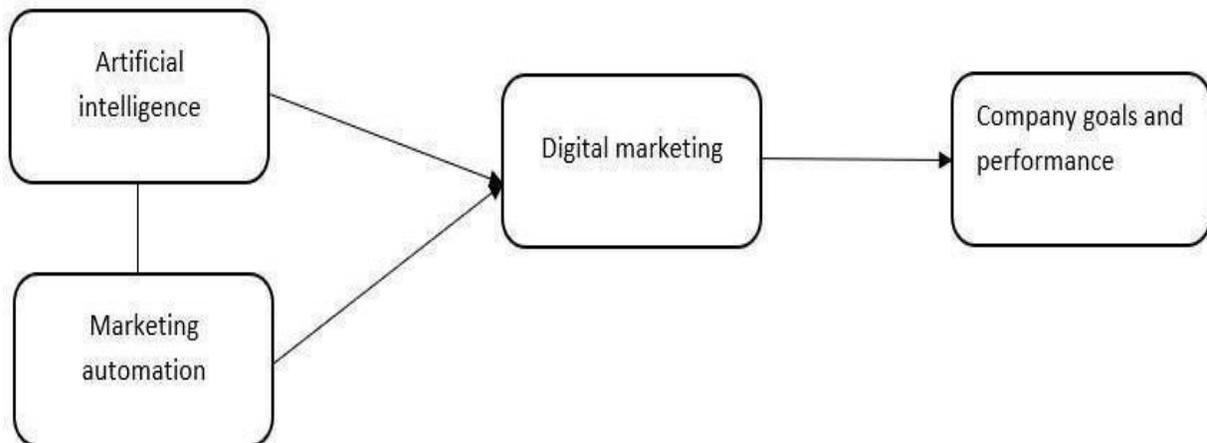
Conceptual Model

Fig 1: Concept Model (Source: Tanveer, M., Khan, N., & Ahmad, A. R. 2021, April)

The conceptual diagram above illustrates the interconnectedness of marketing automation, digital marketing, business objectives, and performance. It highlights the relationships between these elements, showing how marketing automation, artificial intelligence (AI), and digital marketing work together to influence overall business outcomes.

AI is meant to have an important part in enhancing digital marketing, with marketing automation also having a considerable impact. The model suggests that most businesses will see improvements in their digital marketing efforts when marketing automation and AI are integrated into their systems. This combination is anticipated to drive positive changes in digital marketing strategies, ultimately benefiting business objectives and improving performance.
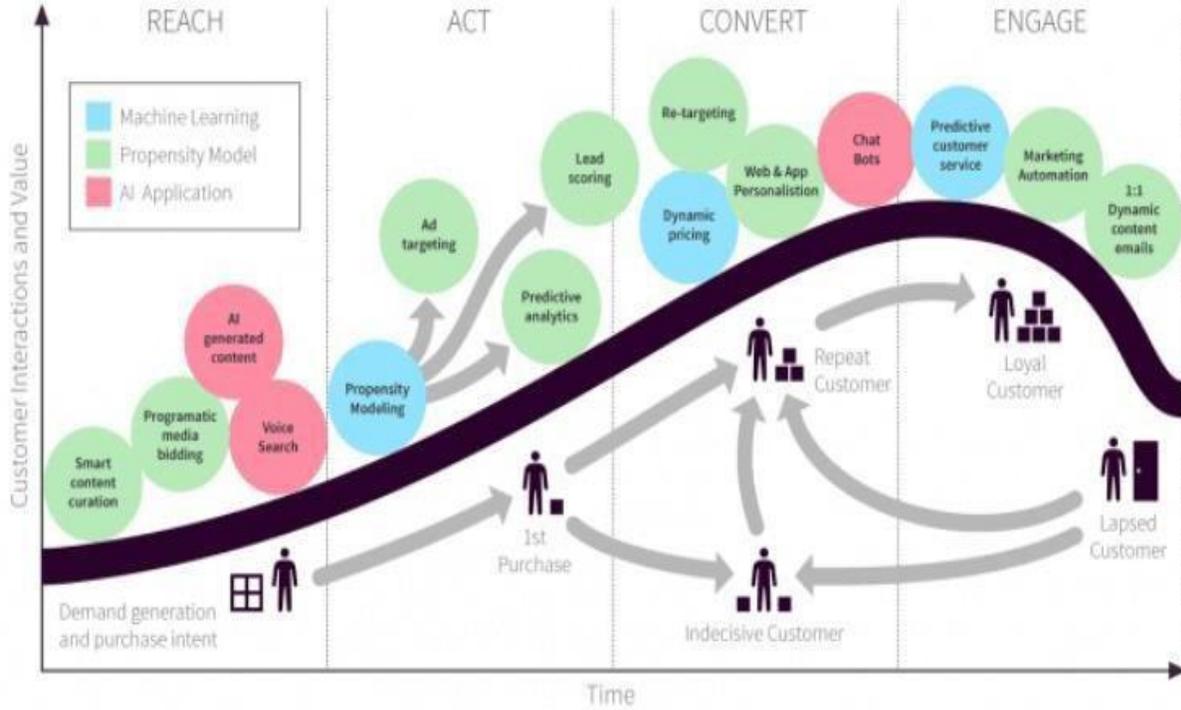
12

Figure 2: AI through the customers lifecycle (Spangenrg, 2017)

Previous Research on AI in Digital Marketing

1. **AI's Impact on Marketing Efficiency**

   McKinsey & Company (2018) reported that AI technologies, including ML and DL, have enabled marketers improve efficiency by automatic repeated activities like data analysis, customer segmentation, personalized content delivery. AI-driven marketing campaigns have been shown to result in better targeting and conversion rates compared to traditional methods.

2. **Customer Personalization and Predictive Analytics**

   According to a PwC report (2017), 41% of marketers reported improved performance through the use of AI for customised experiences for customer. AI is instrumental in utilizing predictive analytics anticipate consumer needs, enabling businesses to deliver timely and relevant recommendations across various digital platforms.

3. **AI in Programmatic Advertising and Social Media**

   Research by Kaplan and Haenlein (2020) emphasized the growing role of AI in programmatic advertising, where algorithms optimize ad placements based on real-time data. Similarly, Artificial

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Intelligence powered tools for social media networking marketing examine consumer behavior and engagement patterns to optimize distribution of content and campaign effectiveness.

RESEARCH METHODOLOGY

This chapter outlines the methodological framework and the qualitative approach used in this thesis. It provides a comprehensive overview of the data collection process, validity measures, analysis techniques, limitations, and ethical considerations. Data was collected through structured interview questions, and a template analysis was conducted in advance to guide the research process.

Approach

The qualitative methodology employed in this paper involved conducting semi-structured one-on-one interviews. The eleven interview questions, designed to address the research questions, are included in the appendices. While qualitative research typically involves fewer responses, it offers deeper insights into the topic at hand. The focus of this approach is on the content of what is said, rather than on statistical data. To gather relevant information for this study, qualitative methods were used. The analysis will connect the theories discussed in the paper with the data obtained from the interviews to provide a reliable response to the research questions.

Data Collection

This thesis is grounded in **inductive reasoning**, where the research was initially approached with an open mind. Inductive or exploratory studies are common in qualitative research, and this approach was particularly important given the limited knowledge surrounding the use of AI in digital marketing.

The research aimed to explore the perspectives of digital marketing professionals who incorporate artificial intelligence into their work. To achieve this, a qualitative study was conducted by interviewing 10 experts in the field. Thematic content analysis was used as the primary method to analyze the data collected from the interviews and other sources. This method was chosen because it was the most suitable for interpreting the qualitative data gathered. The primary objective of the research was to gain valuable insights and understanding from the experiences and viewpoints of professionals working in the digital marketing sector.

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Primary Data

Rather than using a survey, qualitative interviews provide <mark>a deeper understanding of the subject matter.</mark> Interviews often feel more meaningful than completing a brief survey. For this study, **Semi-structured interviews** served as the main mode of data collection, as they provided flexibility to explore topics in depth while maintaining a clear focus for preparation of key discussion topics while also giving interviewees flexibility in how they responded.

The interviews provided access to primary data and insights into the informants' true opinions and beliefs. This approach was instrumental in assessing the impact of AI on digital marketing, offering detailed information on the subject. Among the six interviewees, three were AI experts and three were marketers. The AI experts were selected because of their use of AI tools and techniques in managing marketing operations. The marketers were chosen based on previous conversations about digital marketing and our LinkedIn connection.

I aimed to speak with experts in both digital marketing and AI technology to gather valuable primary data, statistics, and knowledge from their personal experiences. Each semi-structured interview was designed to involve only one participant at a time. During these interviews, it is generally advisable to record the session or take detailed notes. However, due to the **Covid-19 pandemic**, face-to-face interactions became more challenging, affecting both physical and mental health. To prioritize participants' safety, the interviews were conducted digitally via Google Meet or telephone, offering convenience and comfort for the interviewees. Each interview was tailored to the participant's preferred communication method, with the length of each session varying based on how much information the participant was willing to share and the extent of the discussion. The interview questions were designed to align with the relevant theories, as the purpose was to operationalize and analyze how the concepts were applied and connected to the informants' experiences.

Secondary Data

Secondary data means info that has already been gathered, analyzed, and documented by other sources. This data typically includes details from sources such as official reports, censuses, or previously conducted research.

For this thesis, I reviewed recent research in the field to ensure the content was current and relevant. According to the authors, a **body of literature** refers to any info that is used for uses other than its original intent. It can be transported across different contexts, locations, and times, and is supported by tangible (including digital) evidence. This literature review helped to enrich the study, offering a broader context for the findings from the interviews.

Data Analysis

Thematic analysis offers several key advantages, including its flexibility when dealing with large data sets and its accessibility for researchers who may be new to qualitative data analysis. For this thesis, a **thematic framework analytical approach** is used. The first step in conducting this analysis involves reviewing the transcripts of the data collected. Once the researcher becomes familiar with the data, they begin observing and identifying recurring patterns.

The next step is to create a **thematic framework** based on the data set. At this stage, the emerging themes may be influenced by the data itself, even though they could have initial roots in existing literature or concepts. The third step involves **indexing**, which connects specific themes to corresponding sections of the data. The data points are then organized and mapped out according to their contextual values, such as category values.

In the final stages of analysis, **mapping** and **interpretation** are carried out based on the conceptualization of the data, guiding the research process. Researchers are responsible for carefully analyzing the data from each question to identify connections between the data and the central research theme. This approach allows for the categorization and hierarchical organization of themes, helping to ensure the **reliability** of the qualitative analysis.

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Validity and Reliability

A method is considered legitimate when the results precisely convey the participant's implications, to start with. Second, after all participants and viewpoints have been considered, the study's validity is guaranteed. Third, each component of the study is critically examined. Last but not least, it seems that the researcher's credibility is based on reflection. Without altering their connotation, the researchers always used terms as the subjects of their claims.

- All interview data were considered in the study analysis and codification.

- By using relevant information, the study maintains a consistent line of reasoning.

- The researcher who conducted this study doublechecked the paper's accuracy and took the supervisor's and other authors' criticisms into account.

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FINDINGS

As previously stated in the research methods, a total of 10 participants contributed source for the report. To better understand and analyze the themes that emerged from the data, the tool **MAXQDA** *was used. MAXQDA is a software designed for qualitative and mixed methods research, allowing the researcher to organize, code, and analyze the data systematically. By using MAXQDA, the researcher can identify key themes and patterns, making it easier to interpret the data in a comprehensive and structured manner.*

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Interview Results

The results of the study were organized into six distinct themes, which were then analyzed in relation to the research questions. These themes are focused on various aspects of AI's impact on digital marketing, offering insights into both its potential benefits and challenges:

1. **Automation of Time-Consuming or Repetitive Digital Marketing Tasks and Projects:** This theme examines how AI can automate tasks that are typically labor-intensive, allowing marketers to save time and resources.

2. **Task Optimization in Digital Marketing Projects:** This theme addresses how AI enhances existing processes, improving efficiency and profitability by optimizing tasks within digital marketing.

3. **Efficiency & Improvements:** This theme explores various ways AI contributes to efficiency improvements, focusing on the overall traits that AI brings to digital marketing.

4. **The Use of AI, Software Simplicity, and Flexibility:** This theme focuses on the usability of AI tools, their flexibility, and how easy they are to integrate into digital marketing strategies.

5. **The Future of AI in Digital Marketing and Privacy Issues:** This theme looks ahead at the role of AI, particularly in relation to evolving tools and privacy concerns within marketing practices.

6. **Uncertainty Surrounding AI, Potential Drawbacks, and Adverse Effects:** This theme delves into the potential risks, drawbacks, and unintended consequences that may arise from the implementation of AI in digital marketing.

Participant	Name	Designation	Company
P1	Rohit Taneja	SDE-AI & Data science	Accenture
P2	Shweta Mehra	Senior Marketing Automation Specialist	Amex
P3	Lakshita Popli	Data Scientist	Google
P4	Mikul Gupta	Robotics Engineer	Udemy
P5	Jyoti Vij	AI Product Manager	Coursera
P6	Rishab Vij	Performance Marketing Lead	Gartner
P7	Neha Sharma	Email Marketing Specialist	TCS
P8	Niharika	Senior SEO Specialist	Cognizant
P9	Masira Naaz	Associate Manager - Biddable	HCL
P10	Suhani Sharma	Product Success Manager	Blinkit

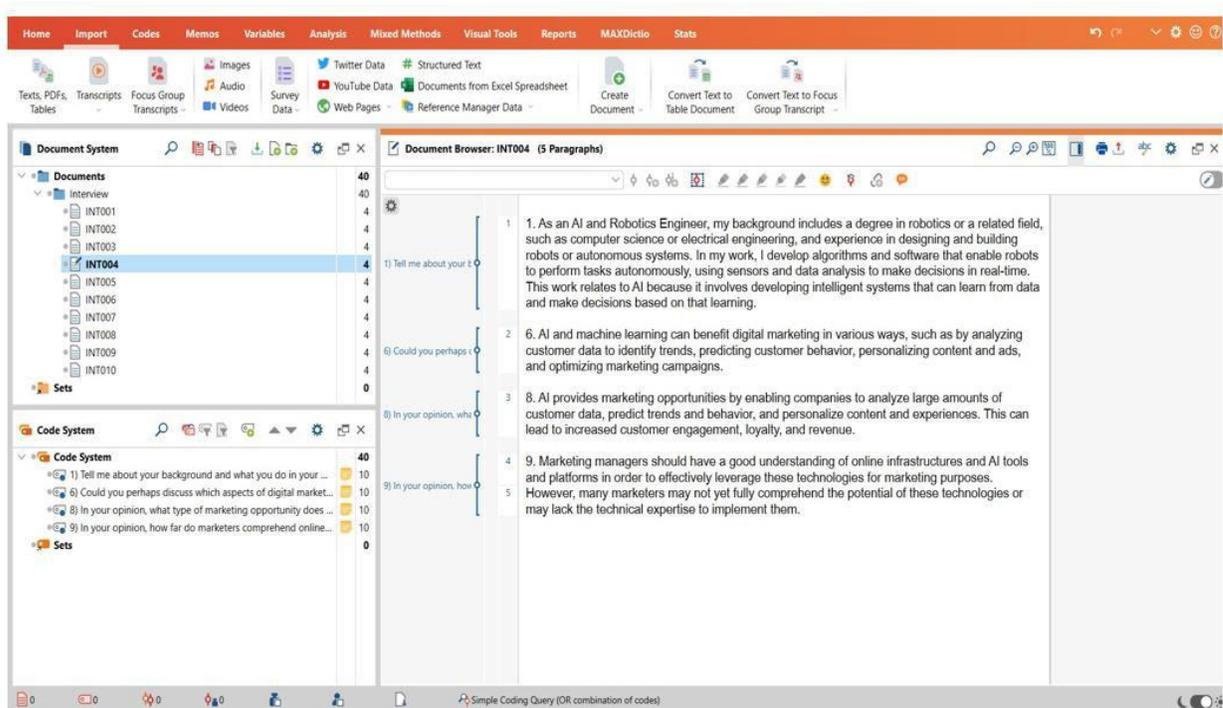**Table 1: List of Participants (Source: Primary Data)**

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Figure 3: Responses from Interview (Source: MAX QDS)

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Theme 1: Automation of tasks

The theme of **automation** emerged consistently across all interviews, with every participant acknowledging its importance in digital marketing. AI-powered tools were highlighted for their ability to automate various tasks, which significantly reduced the time and effort involved in managing marketing campaigns. Key benefits mentioned included:

1. **Automated Bidding:** This feature allows marketing campaigns to adjust bids in real-time without human intervention, optimizing ad spend.
2. **Automation of Repetitive Tasks:** Many interviewees noted how AI streamlined or completely automated mundane tasks, such as data entry and reporting, which traditionally required substantial manual effort.
3. **Handling Large Data Sets:** One of the standout features of AI automation is its ability to process vast amounts of data quickly and efficiently. This was seen as crucial, as processing such data manually would be both time-consuming and error-prone.
4. **Ongoing Optimization:** Participants pointed out that AI systems are capable of continuously optimizing campaigns in the background. This meant that even after the day's manual efforts were over, AI kept working to improve performance without the need for direct human input.

1.
   Suggestions for Approach Refinement: AI was also noted for its ability to offer recommendations for alternative approaches to tasks, which could improve decision-making.
2. **Unified Targeting and Automatic Optimization:** The automation allowed for more streamlined and effective audience targeting across various online platforms, ensuring that campaigns were continuously refined to reach the right people.

In summary, AI-driven automation provided a major boost in efficiency, ensuring that marketing activities were not only faster but also more precise and optimized, with minimal human intervention required.

▲ Theme 2: Optimization of tasks

The theme of **optimization** was a focal point in many of the interviews, with participants discussing how AI contributes to producing more reliable and superior results in digital marketing. Several key insights emerged regarding the impact of AI on optimizing marketing efforts:

1. **Improved Sales and Profits:** Many participants highlighted that businesses have adopted AI to

1.
   optimize their sales processes and drive higher profits. AI's ability to analyze large data sets and identify patterns allowed for more accurate targeting of potential customers, ultimately improving

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sales conversion rates.

2. **Enhanced Targeting Efficiency:** AI was seen as a powerful tool for reaching more precise target groups. By analyzing customer behavior, preferences, and interactions across multiple channels, AI can create more refined customer profiles and ensure marketing efforts are directed at the right audience, leading to greater marketing efficiency.

3. **Faster and More Effective Than Human Effort:** While humans can perform tasks similar to AI, the general consensus was that AI outperforms human capabilities in terms of speed and effectiveness. AI mechanism can process and examine huge amount of data far more quickly than humans, allowing businesses to make real-time adjustments and decisions that would be difficult for human marketers to achieve manually.

4. **Consistency in Optimization:** Unlike human-driven processes, AI ensures continuous optimization, making real-time adjustments to campaigns based on new data, ensuring they remain effective over time.

Overall, participants agreed that AI's role in optimization is transformative, offering businesses the ability to streamline their operations, improve targeting, and achieve better results in a faster, more efficient manner than traditional human-driven methods.

Theme 3: Efficiency & Improvements

The primary benefit of efficiency that was observed was the capacity to save time. When discussing the decreased need for physical labor and the software's capacity to complete certain jobs more effectively than humans could ever hope to, participants brought up this point in a number of interviews. It achieved this, among other things, by accelerating the completion of the assignment. Additionally, the AI was able to produce information-based grading more quickly, saving time and increasing profits.

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Theme 4: Utilization of AI & Change

The impact of artificial intelligence (AI) on digital marketing and the changes it will bring were the main topics of this section. Participants concurred that human decision-making will remain essential even when AI replaces tedious activities. AI has already begun automating manual jobs, and one participant claims that this encourages a more intelligent method of working and gives more control over particular outcomes while reducing control over general data. Many participants thought that by doing away with repetitive jobs, AI would drastically alter the way digital marketers operate. These activities will be completed by machines, and as AI advances, it will alter marketers' daily tasks and create a new, but not entirely nonexistent, type of labor.

Theme 5: Future of tools & Privacy

Humans could completely rely on AI to make the appropriate judgment, if not the right one, according to participants in future-focused debates on these topics. Many participants brought up the fact that Finland, in particular, has stringent privacy regulations and that, should something the AI did go wrong, there might be legal ramifications. Many participants contended that the shift was positive and that AI will generate additional employment as the current ones vanished when the subject job losses was raised. Every participant concurred that artificial intelligence (AI) has a promising future overall, particularly in the area of digital marketing.

Theme 6: Uncertainty of AI

AI is generally more effective and optimized than humans, according to the participants. One member, however, talked about how they personally lost money when AI was first being used because they too had to learn how to use it. It was claimed that, once set up, it will pay for itself, despite the fact that some manual labor is needed. However, this claim primarily referred to one participant. There was also discussion on the topic of confidence in AI, with several attendees raising doubts about its reliability, particularly when utilizing Google's own automatic bidder. Participants also believed that people were better at creating individualized content that appeals to customers than AI.
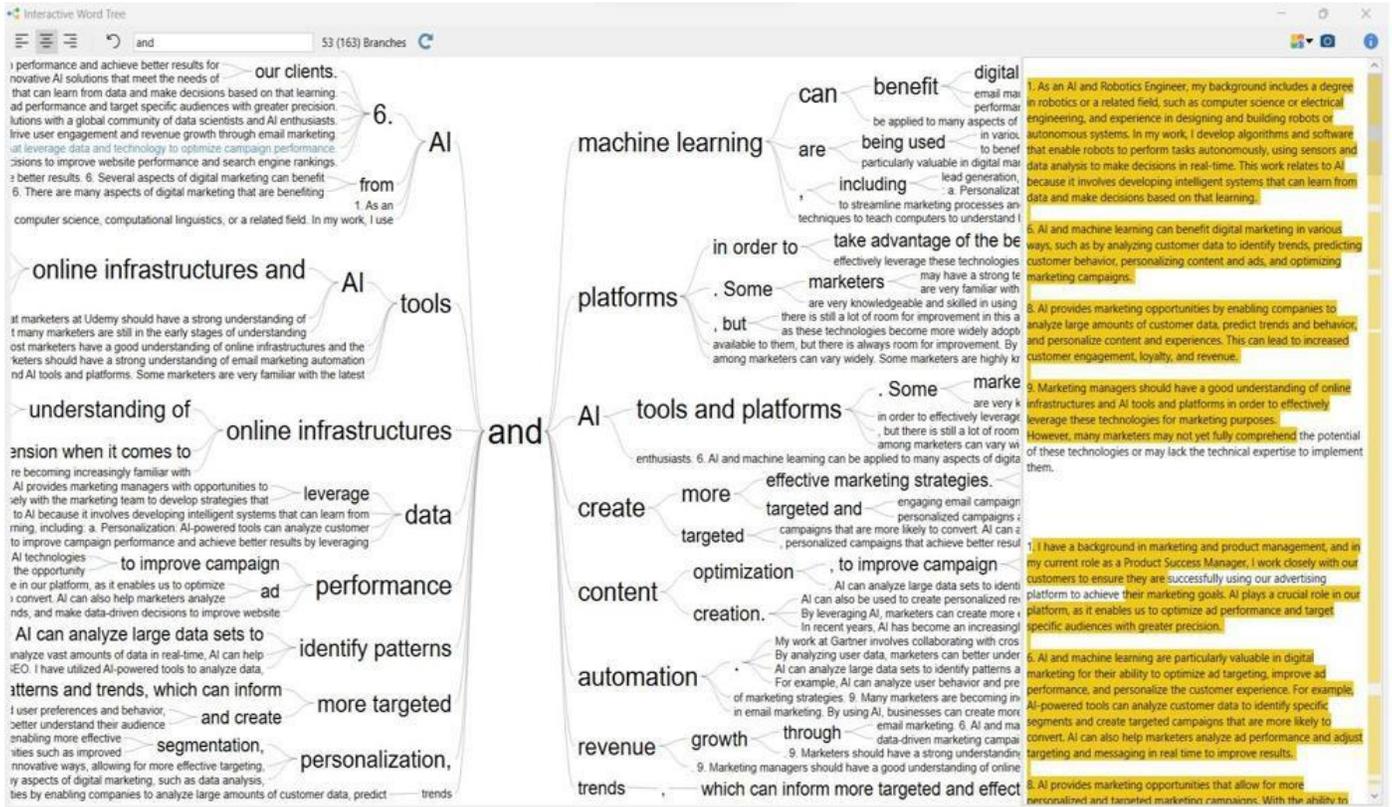
24

Figure 4: Interacting Words Trees (Source: MAXQDS)

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ANALYSIS

This part gives a summary of conducted interview findings. As outlined on research methods section, the qualitative nature of this study requires a detailed analysis of data to uncover patterns. The themes presented here was derived directly from the participants' responses, which were notably similar, ensuring that the findings reflect the participants' authentic viewpoints. By using their exact terminology, the results mitigate the risk of bias, ensuring that the interpretation aligns closely with the participants' perspectives.

With steps taken to find and validate values for this project, the report is poised to map, compare numbers in alignment with the research questions. This analysis will guide the next steps in the study, providing a learning of AI's role and effect on marketing, as explored by the insights shared by the participants.

As mentioned in methodology section, 6 individuals participated in the study, divided into 2 groups on the basis of their occupation: three marketing professionals and three AI experts. These participants were selected to provide diverse point of view on the use of Artificial Intelligence in digital marketing. The interview guides are categorized by their relevance to the research objectives, ensuring focused data collection.

The key finding of the study is AI can enhance strategies by using customers data swiftly. This capability allows companies to optimize their strategies, create personalized customer experiences, and improve decision-making. The study also emphasizes that marketers when they are well-versed in the tools techniques they use, understanding both marketing management and the practical applications of AI.

Furthermore, AI's ability to process vast datasets and generate predictive models allows businesses to navigate dynamic shifts in digital commerce more effectively. By leveraging AI, companies can make data-driven decisions that enable personalized marketing, better customer engagement, and improved financial outcomes. Ultimately, the study suggests that integrating AI and machine learning expertise into marketing practices enhances predictive capabilities and supports more effective marketing strategies, offering substantial competitive advantages.

Perceptions on AI in marketing

The opening section of the interview explored the participants' professional backgrounds and their understanding of artificial intelligence in marketing. Participants were asked to define AI in the context of marketing and to share their thoughts on the relationship between the two fields.

The result revealed a wide range of professional backgrounds amongst the participants, with various specializations in AI and marketing. Despite this diversity, all participants shared a common view on the relationship between AI and marketing. They unanimously agreed that AI-driven automation is central to modern marketing initiatives. Each participant emphasized that AI's current state is crucial for automating marketing processes, and that despite having expertise in other areas, they decided to deepen their knowledge of AI to improve their marketing strategies.

Participants also expressed a shared perspective on AI's operational characteristics, likening its decision-making process to that of a human brain, but with the advantage of being faster and more effective. According to the marketing AI experts, the AI systems in use today have become sophisticated enough to make decisions similar to human ones, but with far greater efficiency.

Figure 5: Topic of Modelling (Source: MAX QDS)

Word Combinations   — □ ✕

10 Documents   9 Word Combinations

▼ ▼ ▦ 🔍 ▣ ⊖ ▤ ↺ | Display top ranks ⌄ | Min. frequency 3 ▲▼ ☁ ↻   ⬚⌄ 🅧 🌐 ⬆ ⓘ

Word combination	Words	Frequency ▼	%	Rank	Documents	Documents
◆ provide market opportunity	3	6	3.92	1	6	60.0
◆ analyze customer datum	3	4	2.61	2	3	30.0
◆ automate routine task	3	3	1.96	3	2	20.0
◆ improve campaign performance	3	3	1.96	3	1	10.0
◆ improve datum analysis	3	3	1.96	3	2	20.0
◆ include lead generation	3	3	1.96	3	2	20.0
◆ machine learn algorithm	3	3	1.96	3	2	20.0
◆ optimize ad target	3	3	1.96	3	3	30.0
◆ personalize user experience	3	3	1.96	3	2	20.0

Figure 6: Word of Combinations (Source: MAX QDS)

**Word frequencies**   — □ ✕

10 documents (1276 analyzed words)   130 different words (type-token ratio = 0.1019)

▼ ▼ ▦ 🔍 ▣ ⊖ ▤ ↺ | Display top ranks ⌄ | Min. frequency 3 ▲▼ ☁ ↻   ⬚⌄ 🅧 🌐 ⬆ ⓘ

Word	Word length	Frequency ▼	%	Rank	Documents	Documents %
◆ market	6	52	4.08	1	10	100.00
◆ marketer	8	28	2.19	2	10	100.00
◆ customer	8	27	2.12	3	7	70.00
◆ campaign	8	25	1.96	4	8	80.00
◆ datum	5	24	1.88	5	9	90.00
◆ learn	5	23	1.80	6	10	100.00
◆ target	6	21	1.65	7	9	90.00
◆ improve	7	20	1.57	8	7	70.00
◆ machine	7	19	1.49	9	10	100.00
◆ tool	4	19	1.49	9	10	100.00
◆ experience	10	17	1.33	11	7	70.00
◆ create	6	16	1.25	12	6	60.00
◆ understand	10	16	1.25	12	10	100.00
◆ analyze	7	15	1.18	14	7	70.00

Figure 7: Word of Frequencies (Source: MAX QDS)

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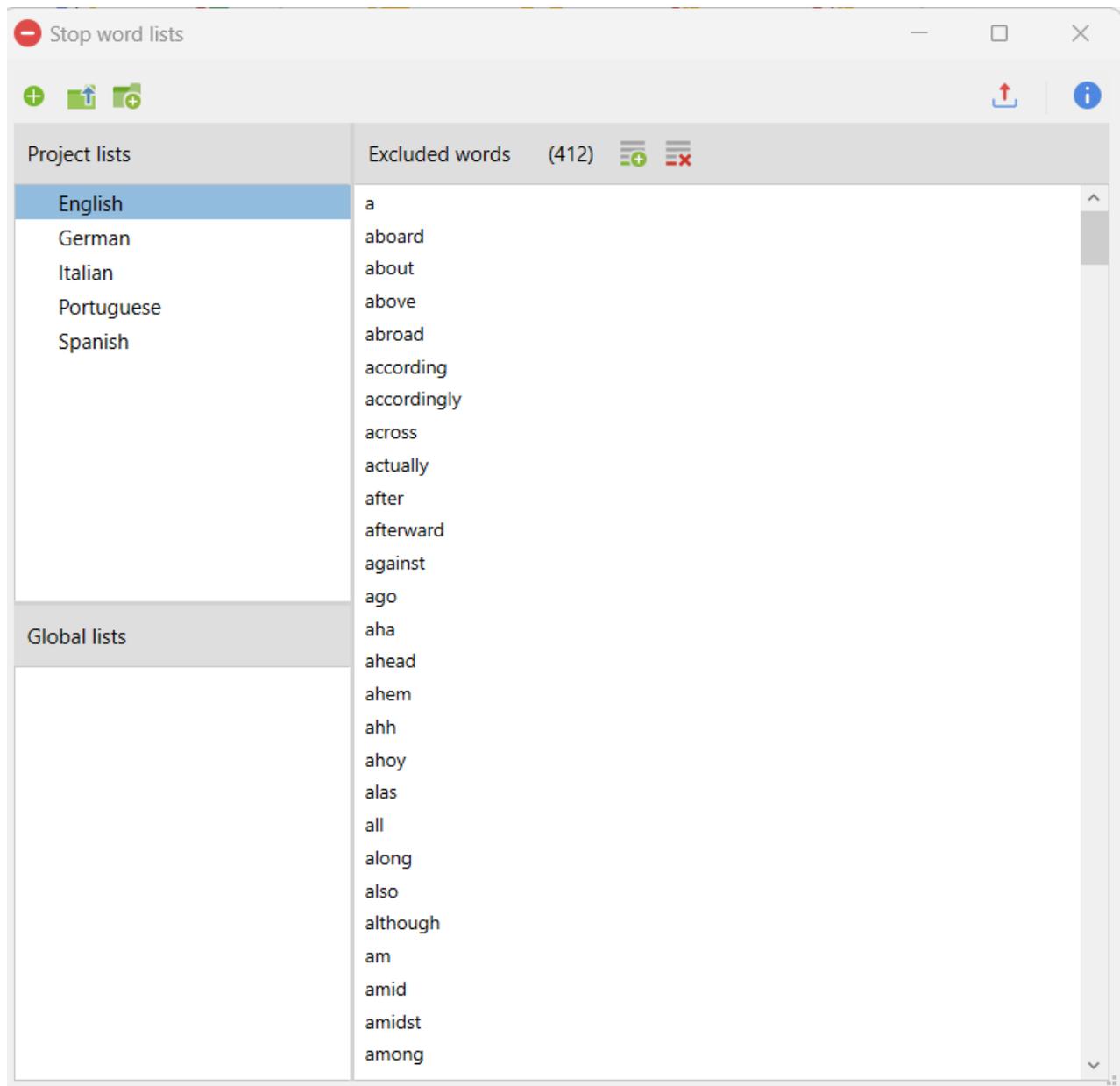
Figure 8: Stop of Words Lists (Source: MAX QDS)

How AI is developing and how it affects marketers' duties

The interview also delves into the responsibilities marketers should take on and how AI can be applied within marketing. Participants highlighted the vitality of socially awareness & innovation in the automating process, emphasizing role AI in transforming marketing strategies.

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When asked about their expectations for AI, the participants expressed excitement, anticipating significant improvements in marketing strategies. They discussed how AI, by leveraging data from previous campaigns, could map markets, track customer locations, and identify content that resonates most with audiences. One participant even predicted that AI would eventually revolutionize the relationship between marketers and customers, making it easier to personalize interactions and understand customer emotions. This level of emotional and psychological insight would enable marketers to tailor their strategies more effectively, meeting customer needs in a more targeted and empathetic manner.

Marketers also shared their belief that AI would help achieve marketing's ultimate goal: customer satisfaction. By gathering and analyzing data about customers' preferences, AI is expected to streamline marketing efforts and provide more precise solutions to meet customer demands.

Several marketers mentioned that the integration of AI technologies had significantly boosted productivity in their organizations. Tools were noted as key technologies enhancing marketing systems. Marketers emphasized that, in today's digital landscape, being tech-savvy is essential. AI is seen not just as a tool but as a way to automate and simplify the application of human cognitive processes, making marketing operations more efficient and effective.

The Impact of AI on Marketing

The participants in the marketing interviews emphasized how AI has significantly enhanced their growth opportunities and expedited their ability to learn from processed data. In modern marketing, a deep understanding of customer needs and the ability to act quickly on that data are crucial. Without AI, businesses risk being unable to make fast, data-driven decisions, which is essential in today's competitive environment.

Beyond task automation, the most notable benefit of AI for marketers is its ability to enhance the relevance of their offerings to customers. With the sheer volume of options and information available, consumers can feel overwhelmed. AI helps businesses better match content with customer interests, thereby improving customer engagement and increasing sales. By understanding consumer behavior across multiple platforms and touchpoints.

Customization in AI can be interpreted in different ways depending on context and individual preferences. For some, it may involve a tailored recommendation system based on past behaviors and preferences. Others may associate personalization with specific habits/ needs. No matter of the form it takes, customization is essential for building customer loyalty and satisfaction.

Leveraging AI allows businesses to deliver more relevant and engaging experiences at various touchpoints, which is crucial for improving customer loyalty. However, companies must balance personalization with privacy concerns, ensuring that customers' personal data is handled ethically and securely.

Marketers who fail to integrate AI into their strategies face challenges in quickly processing and utilizing large amounts of customer data. Timing is critical—if marketers fail to engage customers at the right moment with the right information, there is a risk that potential opportunities will be missed. With AI, marketers can ensure they deliver accurate, relevant information, which is vital given that consumers often struggle to differentiate between valid and misleading information online. By making decisions that are both precise and timely.

AI tools are employed to define, map, and understand key performance indicators (KPIs), which are critical for optimizing marketing efforts and measuring their success.

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Skills for implementing AI in marketing

The results suggests that expertise in Artificial Intelligence is not essential for using AI systems effectively. The participants indicated that specialized skills are secondary to the ability to operate the technology itself. They argued that the use of AI does not inherently make a system flawed, and both groups agreed that prior knowledge of AI is not a prerequisite for utilizing AI tools. However, they acknowledged that having some understanding of AI could be beneficial.

Additionally, the interviews highlighted the importance of prior AI experience, especially among specialists. They emphasized the need for marketers to be aware of the ethical and legal implications, particularly regarding datas' protection. As such, they called for the development of clear regulations and standards to promise ethical.

Marketers also recognized the necessity of collaboration between AI experts and marketing professionals to effectively integrate AI into marketing strategies. They stressed the ongoing need for learning and staying current with emerging AI trends and technologies to remain competitive in the evolving marketplace.

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CONCLUSION, RECOMMENDATIONS & LIMITATIONS

The marketing industry is widely recognized for its significant growth potential, particularly through the integration of technology. Over time, marketing strategies have evolved, and modern technological advancements have played a pivotal role in increasing efficiency. These innovations help businesses to make larger number of good to enhance their ability to advertise and sell products more effectively. The fusion of big data and the development of smart applications has also led to breakthroughs in marketing, allowing organisations to track individual preferences or behaviors to tailor their marketing efforts.

This study focused on the effect of AI and market automation in improving digital marketing outcomes. Findings indicate that both AI and automation have been highly beneficial for digital marketing efforts. Companies that adopted these technologies saw significant improvements, aligning with earlier research. Marketers are optimistic about the continued role of AI in replacing many traditional marketing processes, with a focus on refining automation to achieve even better results. In particular, marketers are eager to learn how to use these technologies to communicate more effectively with customers and better understand their needs.

However, concerns were also raised, particularly around the control companies have when implementing automation of AI. Some marketers expressed uncertainty about how their organizations regulate AI-driven marketing efforts. For marketing managers who are not fully familiar with AI technology, integrating AI into marketing systems can be seen as costly and unnecessary. Furthermore, some marketers feel that AI is still limited in its understanding of human intelligence, a point also shared by AI experts. While automation is praised for solving problems and simplifying tasks, there is an underlying fear of losing control over marketing campaigns. It is also suggested that AI expertise alone does not necessarily lead to a dramatic improvement in marketing performance.

The key AI expertise needed for automation is the ability to evaluate the system's performance by understanding the capabilities of the tools being used. It's important not only to understand the basic design of AI tools but also to know how they function in practice, ensuring that their deployment aligns with the goals of the marketing strategy. As such, caution is advised when incorporating AI into digital marketing

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strategies.

1 Enabling the creation of highly personalized customer experiences and pushing marketing efforts to unprecedented levels. Marketing managers should increasingly aim to integrate market automation and AI into their systems as these technologies become more ubiquitous. AI is expected to have a positive economic impact, potentially boosting GDP through higher investment returns. As technology continues to replace traditional human-driven marketing tasks, processes like communication are becoming more efficient, contributing to overall effectiveness in the field.

Managerial Implications

This study has highlighted the competencies that marketing professionals will need to develop in the future to be better prepared for the growing influence of AI in marketing. To fully capitalize on AI's capabilities, marketing professionals will need to acquire technical skills to understand and analyze vast amounts of data. As one participant noted, there has always been a technical component to customer experience, and the ability to enhance customer engagement through technological solutions is highly valued.

These skills essential for gathering precious consumer feedback for development of product and its innovation, as well as effectively communicating with customers to meet their needs. Creativity will remain vital for decision-making, fostering business innovation, and determining product features. As AI continues to impact marketing, the advanced role of the marketing specialist will become increasingly crucial.

However, marketers should be cautious about over-relying on data, as this could stifle creativity and encourage risk aversion. Therefore, striking a balance between creativity and data-driven insights will be essential. While AI is predicted to understand and contribute to aspects of the creative process, human creativity will still be key, especially in the development of new products and strategies.

Limitations of this study

This project encountered several drawbacks. First, the size of the sample was limited to six respondents, which may not fully represent the broader reality. Therefore, the findings may only apply to this specific instance, and to gain a more comprehensive understanding, a larger sample size and a quantitative research

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design may be necessary. While there may be similarities with other organizations, some disparities could prevent the findings from being universally applicable.

Additionally, finding experts who were both knowledgeable and willing to discuss AI and digital marketing proved challenging. Despite having promising leads, many potential participants were unable or unwilling to participate due to busy schedules or other reasons. This forced the authors to work diligently to meet their personal goal of completing the study within a limited timeframe. To further enhance the research, the authors also attended business events to expand their network of interviewees.

The study also relied on digital mediums to gather interview data, which, although efficient, may have affected the depth of interaction. Nonetheless, the research process provided valuable experience in time management. Without effective time management, completing the thesis within the given timeframe would have been impossible.

Recommendations for Future

For future research, conducting interviews within a specific industry could provide a more specialized and in-depth understanding of the unique advantages and use cases of AI in digital marketing. Given the time constraints faced in this study, longer interviews with additional follow-up questions, particularly about the future of AI, could further enrich the data and provide more comprehensive insights.

While this study covered a broad range of AI and digital marketing topics, future research could build on these foundations by focusing on the most current and popular AI features in the industry. Additionally, some of the interviewees in this study were relatively young professionals, so incorporating perspectives from more experienced AI specialists would likely add valuable depth and offer a broader view of how AI is evolving in the field.

APPENDIX

Appendix A

Interview Questions

1. **Background and Job Role:** Can you describe your professional background and your current role? How is your work related to artificial intelligence?

2. **Understanding AI:** What does artificial intelligence mean to you personally, and how do you interpret its relevance?

3. **AI and Digital Marketing:** How familiar are you with digital marketing, specifically the relationship between AI and marketing strategies?

4. **Required Skills for Marketing Managers:** What skills, knowledge, and abilities do you think marketing managers need to successfully apply AI-driven marketing automation? Where did you gain your knowledge about AI, SEO, and machine learning?

5. **Experience with AI and Marketing Tools:** Do you have any experience using machine learning (ML), content marketing, or social media marketing strategies? If so, which ones?

6. **AI in Digital Marketing:** Can you share your thoughts on the aspects of digital marketing that AI currently helps improve?

1. **Future of AI in Marketing:** In your opinion, what will the role of AI be in the future for marketing businesses, consumers, and society as a whole?

2. **Marketing Opportunities wjith AI:** What marketing opportunities do you think AI presents for businesses?

J. **Understanding AI Tools:** How would you assess the level of understanding that marketers have about online platforms and other AI tools?

4. **Impact of AI on Consumer-Brand Interaction:** How do you think AI will affect the way companies and consumers interact with each other?

5. **Obstacles to AI Development in Marketing:** What do you believe is the biggest obstacle to the development and integration of AI in marketing?